



**Factors Affecting the Financial Performance of MSMEs: Financial Literacy, Financial Inclusion, Financial Self-Efficacy, Financial Technology, Credit Granting, and Intellectual Capital**

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**Abstract:** MSMEs are one of the economic icons that have the biggest impact on Indonesia's economic growth, especially when a crisis occurs. MSMEs are able to get through monetary crises such as in 1998 and during the Covid-19 pandemic. MSMEs are independent and have great potential to improve community welfare. This research aims to examine the influence of the variable's financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital on the financial performance of MSMEs in the Bangka Belitung Islands Province. This research is quantitative research with an associative method using a quantitative approach from primary data through distributing questionnaires. The sampling method was nonprobability sampling with a purposive sampling technique so that 102 MSME actors were obtained. The data analysis technique uses SPSS version 26 software. The research results prove that partial financial inclusion (X2), financial technology (X4), credit granting (X5), and intellectual capital (X6) have a positive and significant effect on the financial performance of MSMEs, while financial literacy (X1) and financial self-efficacy (X3) do not have a positive and significant effect on the financial performance of MSMEs. Simultaneously, the variables financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital have a positive and significant effect on the financial performance of MSMEs in the Bangka Belitung Islands. The R Square value in this research is 0.885, so it is concluded that 88.5% of the variation in the dependent variable can be explained by the independent variable and the remaining 11.5% is influenced by other variables not examined in this research. It is hoped that the research results can become reference material and motivation for MSMEs in improving the financial performance of their businesses.

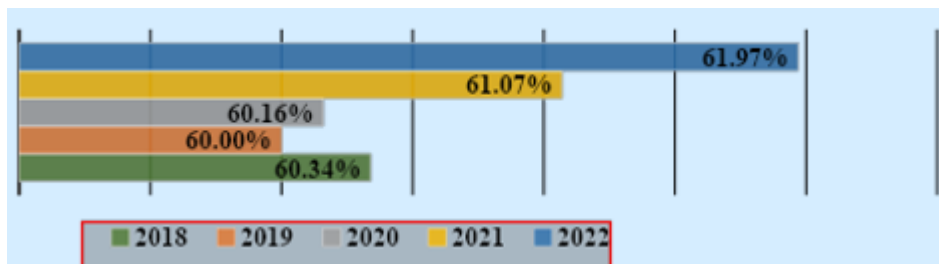
**Keywords:** Credit Granting; Financial Inclusion; Financial Literacy; Financial Performance;

Financial Self-Efficacy; Financial Technology; Intellectual Capital; MSMEs

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## INTRODUCTION

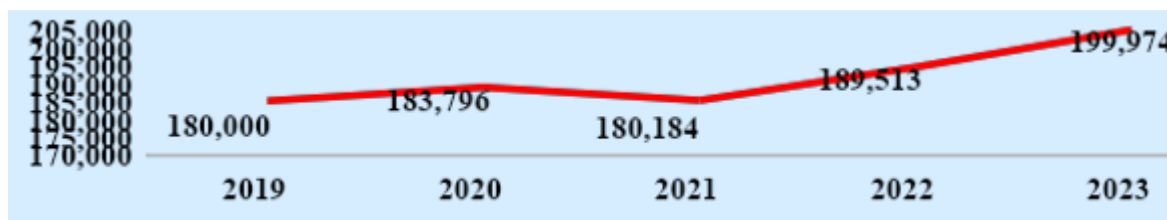
Micro, Small, and Medium Enterprises (MSMEs) are one of the *icon* economies that have the greatest impact on Indonesia's economic growth (djkn.kemenkeu.go.id, 2022). SMEs in Indonesia also have an important role in the economy, especially when a crisis occurs. MSMEs are able to get through the monetary crisis like in 1998 and during the pandemic. *covid-19*. MSMEs are part of Indonesia's independent economy and have great potential to improve community welfare (Arifin et al., 2021; Gumelar et al., 2023; Sari & Kusumawati, 2022).



**Figure 1. Contribution of MSMEs to GDP (2018-2022)**

Source: (KEMENKOPUKM, 2023)

MSMEs are able to consistently contribute to the national Gross Domestic Product (GDP) in Indonesia (KEMENKOPUKM, 2023). According to (Hartanto & Pramuka, 2022) MSMEs made the highest contribution to investment, namely 60.04 percent of total investment. MSMEs contribute fully to the digital economy which is developing rapidly throughout the world by becoming local economic drivers that encourage economic growth (KEMENKOPUKM, 2023). Every region in Indonesia is experiencing the development and growth of MSMEs, including the Bangka Belitung Islands Province.



**Figure 2. Number of MSMEs in the Bangka Belitung Islands Province**

Source: Bangka Belitung Cooperatives and UMKM Service (2023)

Based on Figure 2, it can be seen that from 2019 to 2023 the number of MSMEs in Bangka Belitung experienced fluctuations and significant growth in MSMEs in Bangka Belitung occurred in 2022, reaching 189,513 units. The existence of MSMEs is a crucial tool because it has a big impact on economic growth and job creation and reduces poverty levels (BPS Babel, 2024).

MSMEs as a vital tool for the national economy have a big role in economic growth in Bangka Belitung. Bangka Belitung's economy in 2021 in the third quarter experienced growth of 6.11 percent *year on year*, making Bangka Belitung the highest economic growth region in Sumatra (Babelprov.co.id, 2023). Overall, the Bangka Belitung economy in 2021 grew by 5.05 percent the previous year and in the 4th quarter of 2022, it also experienced growth of 4.44 percent. *year on year* (BPS Babel, 2021).

The growth and development experienced by MSMEs is the result of the persistence of MSME players to survive and compete in various economic phenomena that occur. The Bangka Belitung Integrated Business Service Center (PLUT) groups several MSMEs in Bangka Belitung into a list of potential MSMEs in Bangka Belitung so that assistance, empowerment, and budgeting are easier and more focused on MSMEs that are considered to have the ability or competitiveness to be empowered so that they can develop and progress further according to the characteristics of each business (Babelprov.go.id, 2016).



**Table 1. List of Potential MSMEs in Bangka Belitung in 2022**

No	Region	Number of units)
1	Pangkal Pinang City	20
2	Bangka Regency	10
3	West Bangka Regency	11
4	Central Bangka Regency	20
5	South Bangka Regency	20
6	Belitung Regency	2
7	East Belitung Regency	0

Source: PLUT Babel (2023)

Table 1 shows that in 2022 there will only be 0.04 percent of MSMEs included in the list of potential MSMEs in Bangka Belitung out of 189,513 MSME units in the same period. Even though MSMEs are developing rapidly, not all MSMEs have potential because not all of them have the ability and competitiveness to be empowered, especially in the current era of digitalization, there are still many MSME actors who are technologically illiterate, making it difficult to develop and have effective management in production and finance (Babelprov.go.id, 2016)

Managing MSMEs requires reliable human resources and is supported by qualified financial aspects so that it will produce good and maximum financial performance (Nopiyani & Indiani, 2023). Finances that are managed well will produce maximum financial performance so that the business can continue to progress and develop. In order to increase the growth of MSMEs, every MSME actor needs to have knowledge capital, especially in financial aspects to produce maximum financial management so that the business can develop well (Idawati & Pratama, 2020; Tanan & Dhamayanti, 2020).

Each MSME has its own problems and resilience. Finance is one aspect of MSMEs that is very vulnerable to errors in its management. In the process of surviving and developing, MSMEs are often blocked by significant financial challenges, making finance the main obstacle faced by MSMEs (Anggraeni, 2022); (Ayustia et al., 2023; Fauzan, 2023; Mayasari, 2022).

*Financial performance* or financial performance plays an important role in the development and progress of an MSME through improving financial management today. Managing finances and improving the financial performance of a business cannot just be done without knowing what aspects or indicators are needed and have been proven to have an effect on improving a business's financial performance. Based on existing literature, there are several other indicators that influence the financial performance of an MSME, namely *financial literacy*, *financial inclusion*, *financial self-efficacy*, *financial technology*, *credit granting*, and *intellectual capital*.

According to (Fadilah et al., 2022); (Rizkynanda et al., 2023), variable *financial literacy* and *financial technology* regularly positively and significantly affect the financial performance of MSMEs. Besides that, *financial inclusion* encourages MSME performance positively and significantly (Oke et al., 2023). *Financial self-efficacy* is well positive and significantly influences the financial performance of MSMEs (Asmin et al., 2021). Temporary (Octaviani & Putri, 2021), capital and *credit granting* affecting the financial performance of MSMEs. Other research explains that managing *intellectual capital* will improve financial performance (Hasmirati & Akuba, 2022).

There are many indicators that influence the financial performance of MSMEs. From the results of several previous studies that have been carried out, it is concluded that there is no consistency in the results of the indicators or variables that have been tested. Previous research only used a few indicators and there has been no research



related to all indicators that have been tested and proven to have an influence on the financial performance of MSMEs in a region.

Therefore, researchers need to conduct further research to test the effect of *financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital* on the *financial performance* of MSMEs in Bangka Belitung in order to produce consistent findings and provide a more definite understanding of these indicators in influence MSME financial performance.

This research aims to gain a deeper understanding of *financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital* on the financial performance of MSMEs, especially MSMEs in Bangka Belitung.

It is hoped that the results obtained can be an encouragement to MSMEs and others in Bangka Belitung to have views regarding the improvements or improvements in financial performance that they need so that they are able to obtain good financial performance in order to continue to exist and even be able to immediately join in Potential MSMEs in Bangka Belitung. This research was carried out to contribute to the development of knowledge in the field of MSME financial performance and provide a clearer understanding of the influence of *financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital* on the financial performance of MSMEs in the Bangka Belitung Islands Province.

## METHODS

This research method is an associative method with a quantitative approach because it aims to determine the influence or relationship between two or more variables with data in the form of numbers which are then analyzed using statistical methods on the variables used in this research, namely independent variables (Financial Literacy (X1), Financial Inclusion (X2), Financial Self-Efficacy (X3), Financial Technology (X4), Credit Granting (X5), and Intellectual Capital (X6) to the dependent variable (financial performance (Y)) in MSMEs in the Bangka Belitung Islands Province.

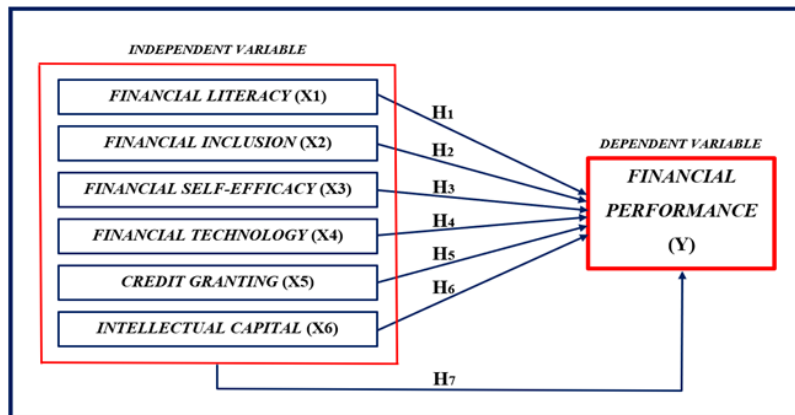
Researchers conducted research on MSMEs in the Bangka Belitung Islands Province, where the sample data was first collected through the Bangka Belitung Islands Province Micro, Small and Medium Enterprises Cooperative Service, which was continued to the Integrated Business Service Center (PLUT) of the Bangka Belitung Islands Province. This research activity started from the time the research proposal was ratified, namely from March to May 2024.

The research object in this research is MSMEs in the Bangka Belitung Islands Province. The subjects in this research are MSME actors in the Bangka Belitung Islands Province, complemented by officials at the Micro, Small, and Medium Enterprises Cooperative Service and PLUT of the Bangka Belitung Islands Province.

The population used in this research is all Micro, Small, and Medium Enterprises in the Bangka Belitung Islands Province. From a population of 199,974 MSME units in Bangka Belitung, there are 102 MSME units that have met the criteria for a representative sample and are the sample for this research.

The sampling technique in this research uses the method of Nonprobability Sampling with the technique of purposive sampling which is a method determining respondents to be used as respondents with certain predetermined criteria (Sugiyono, 2019). The criteria in this research are (1) MSMEs that are domiciled in the Bangka Belitung Islands Province; (2) MSMEs that are under the guidance of the Bangka Belitung Integrated Business Services Center (PLUT); (3) MSMEs that have business legality; (4) MSMEs that have business financial bookkeeping at least 2 (two) years (5) MSMEs that have been running for at least 2 (two) years, and 6) MSMEs that apply technology in running their business.

This research uses primary data. Data collection methods were carried out by distributing questionnaires, interviews, and observations. Data collection was carried out in three stages, namely: (1) Distributing questionnaires to MSME players offline (visiting MSMEs directly) and online (using help Google form); (2) Conducting interviews to add information; (3) Conducting direct observations of interview and questionnaire data as well as data at the Micro, Small and Medium Enterprises Cooperatives Service, which was continued at PLUT Bangka Belitung Islands Province.



**Figure 3. Research Framework**

Source: Dewi. A.L & Setiyono. W.P., 2022 and modified by researcher (2024)

By looking at the theoretical framework processed by the researcher, the data analysis technique used in this research is quantitative analysis using assistance *software* SPSS 26 by carrying out: 1) Descriptive Statistical Analysis; 2) Validity test; 3) Reliability test; 4) Normality test; 5) Multicollinearity test; 6) Heteroscedasticity test; 7) Test multiple linear regression analysis; 8) Partial test (t); 9) Simultaneous test (f); and 10) Test coefficient determination (R<sup>2</sup>).

## RESULTS AND DISCUSSION

### Results of Descriptive Statistical Analysis

**Table 2. Results of Descriptive Statistical Analysis**

Descriptive Statistics of Research Variables						
	N	Min	Max	Sum	Mean	Standard Deviation
Financial Literacy	102	6	30	2698	26.45	3.751
Financial Inclusion	102	6	30	2636	25.84	3.914
Financial Self-Efficacy	102	6	30	2683	26.30	3.741
Financial Technology	102	7	30	2742	26.88	3.654
Credit Granting	102	6	30	2693	26.40	3.872
Intellectual Capital	102	7	30	2750	26.96	3.726
Financial Performance	102	7	30	2709	26.56	3.845
Valid N (listwise)	102					

Source: Research Results, Processed Data (2024)

Table 2 shows that the amount of data or N used in this research is 102 which shows a description of each variable in the research it can be seen that the value *mean* is greater than the standard deviation value, so it can be concluded that the data



deviation that occurs is low and the deviation value is flat for the variable *financial literacy*, *financial inclusion*, *financial self-efficacy*, *financial technology*, *credit granting*, *intellectual capital*, and *financial performance*.

Validity and Reliability Test Results

**Table 3. Validity and Reliability Test Results**

Variable	Statement	R Count	R Table	Status	Cronbach Alpha	Status
Financial Literacy	X1.1	0,812	0,164	Valid	0,974	Reliable
	X1.2	0,823	0,164	Valid		
	X1.3	0,815	0,164	Valid		
	X1.4	0,768	0,164	Valid		
	X1.5	0,801	0,164	Valid		
	X1.6	0,808	0,164	Valid		
Financial Inclusion	X2.1	0,802	0,164	Valid	0,976	Reliable
	X2.2	0,792	0,164	Valid		
	X2.3	0,818	0,164	Valid		
	X2.4	0,849	0,164	Valid		
	X2.5	0,858	0,164	Valid		
	X2.6	0,765	0,164	Valid		
Financial Self-Efficacy	X3.1	0,808	0,164	Valid	0,973	Reliable
	X3.2	0,822	0,164	Valid		
	X3.3	0,821	0,164	Valid		
	X3.4	0,809	0,164	Valid		
	X3.5	0,808	0,164	Valid		
	X3.6	0,820	0,164	Valid		
Financial Technology	X4.1	0,798	0,164	Valid	0,975	Reliable
	X4.2	0,840	0,164	Valid		
	X4.3	0,814	0,164	Valid		
	X4.4	0,814	0,164	Valid		
	X4.5	0,824	0,164	Valid		
	X4.6	0,812	0,164	Valid		
Credit Granting	X5.1	0,820	0,164	Valid	0,974	Reliable
	X5.2	0,858	0,164	Valid		
	X5.3	0,812	0,164	Valid		
	X5.4	0,837	0,164	Valid		
	X5.5	0,777	0,164	Valid		
	X5.6	0,817	0,164	Valid		
Intellectual Capital	X6.1	0,825	0,164	Valid	0,973	Reliable
	X6.2	0,859	0,164	Valid		
	X6.3	0,822	0,164	Valid		
	X6.4	0,788	0,164	Valid		
	X6.5	0,835	0,164	Valid		
	X6.6	0,828	0,164	Valid		
Financial Performance	Y.1	0,820	0,164	Valid	0,972	Reliable
	Y.2	0,832	0,164	Valid		
	Y.3	0,819	0,164	Valid		
	Y.4	0,819	0,164	Valid		
	Y.5	0,818	0,164	Valid		
	Y.6	0,806	0,164	Valid		

Source: Research Results, Processed Data (2024)

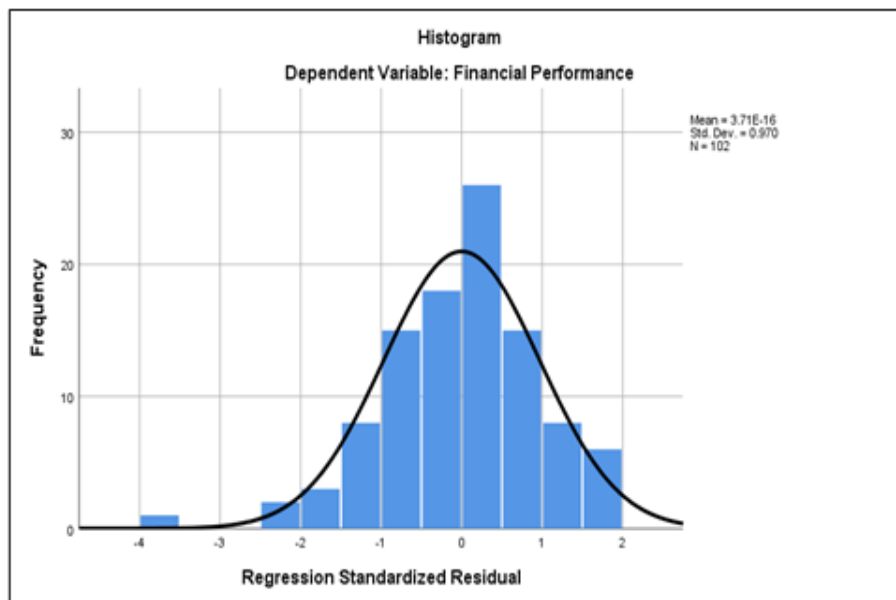


The validity test is said to have passed if the calculated  $r$ -value  $>$   $r$  table.  $R$  table is obtained by the formula  $df = N - 2$ .  $Df$  is the amount respondent, then  $df = 102 - 2$  or  $df = 100$ . Then, the  $r$  table is obtained at a significance of 0.05 or 5% with a one-sided test and the  $r$  table is obtained at 0.164. Based on the test results in Table 3, it shows that all statements from variables  $X_1, X_2, X_3, X_4, X_5$ ,

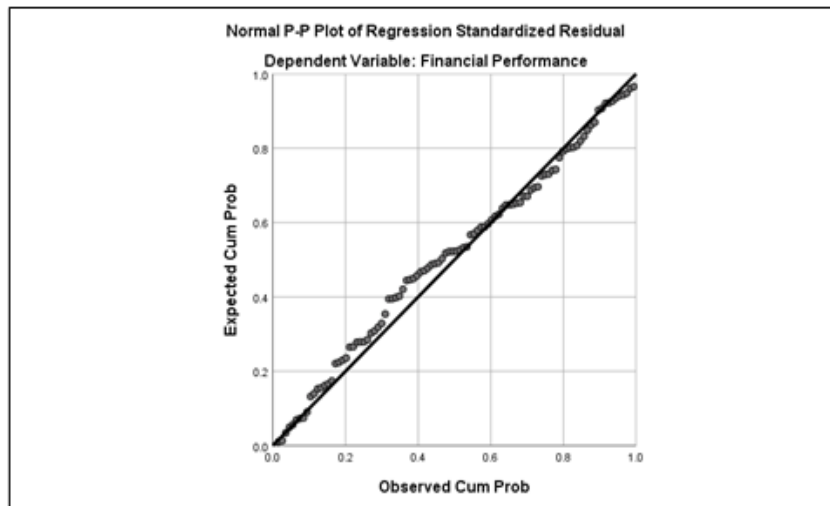
The reliability test is declared accepted or passed if the value *Cronbach's Alpha*  $>$  0.6 (Sugiyono, 2019). According to (Ekinci et al., 2023) *Cronbach's Alpha* value  $>$  0.90 is categorized as perfect reliability. Based on Table 3, it can be seen that all variables were declared to have passed the reliability test and were declared reliable or trustworthy because of their value *Cronbach's Alpha* on each variable  $>$  0.6 so reliability is accepted with the category for all variables having perfect reliability.

#### Normality Test Results

In this study, researchers used the normality test method *Normal Probability Plot*, and methods *Kolmogorov-Smirnov*. Decision-making on the test *Normal Probability Plot* is carried out based on the criteria that if the data spreads around the diagonal line and follows the direction of the diagonal line or histogram graph, showing a normal distribution pattern, then the regression model meets the assumption of normality.



**Figure 4. Normality Test Histogram Graph**  
Source: Research Results, Processed Data (2024)



**Figure 5. Normality Test Results Normal Probability Plot**  
 Source: Research Results, Processed Data (2024)

Based on Figure 4 which shows the histogram graph, it can be seen that the histogram does not deviate to the right and left, the histogram graph curve follows a normal distribution graph pattern. So, it can be concluded that the data tested is normally distributed. Based on Figure 5, it can also be seen that the points are spread out and follow the direction of the diagonal line, so it can be stated that the regression model used in this research meets the normality assumption. Apart from using graphic analysis, the results of the normality test in this study were also strengthened using the Kolmogorov-Smirnov method. This is due to the method *normal probability plot* tends to contain relative interpretations. Therefore, in this study, the researchers also tested the normality of the data using the Kolmogorov-Smirnov statistical method so that interpretations related to the research results were further strengthened.

**Table 4. Normality Test Results of the Kolmogorov-Smirnov Method**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		102
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.26656811
Most Extreme Differences	Absolute	.080
	Positive	.035
	Negative	-.080
Test Statistic		.080
Asymp. Sig. (2-tailed)		.108 <sup>c</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Research Results, Processed Data (2024)

In the normality test, if significance is  $> 0.05$  then the data is normally distributed. Based on Table 4, it can be seen that the significance value of the Kolmogorov-Smirnov test is 0.108, which means that the variable financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital to financial





performance has data that is normally distributed because the significance value of 0.108 is greater than 0.05. So, it can be concluded that the residuals of the regression model in this study are normally distributed so that the assumption of residual normality has been fulfilled.

### Multicollinearity Test Results

**Table 5. Multicollinearity Test Results**

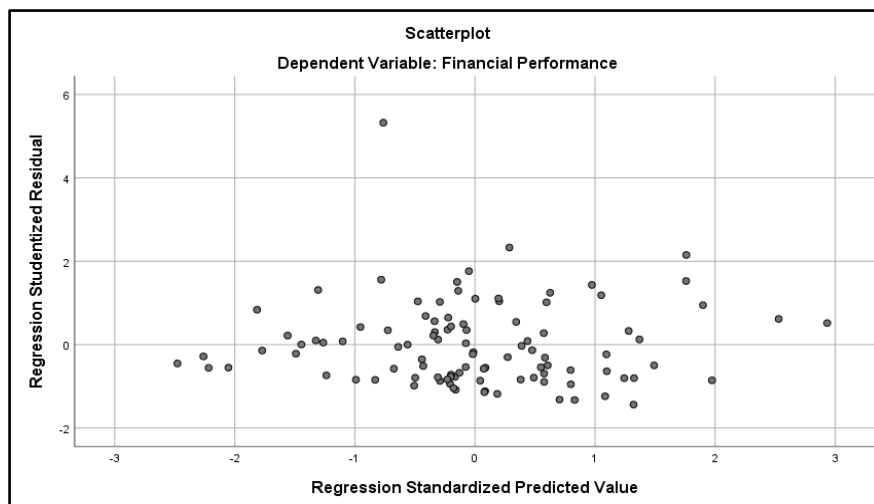
Variable	Tolerance	VIF	Conclusion
Financial Literacy	0,140	7,165	Non-multicollinearity
Financial Inclusion	0,201	4,974	Non-multicollinearity
Financial Self-Efficacy	0,130	7,719	Non-multicollinearity
Financial technology	0,157	6,380	Non-multicollinearity
Credit Granting	0,159	6,290	Non-multicollinearity
Intellectual Capital	0,136	7,326	Non-multicollinearity

Source: Research Results, Processed Data (2024)

The multicollinearity test is declared passed if the value *tolerance* > 0.1 and the VIF value < 10, which means that there is no multicollinearity or the regression model in this study is free from multicollinearity. Based on Table 5 it can be seen that the value *tolerance* of each independent variable is greater than 0.10 and the VIF value of each variable is smaller than 10. So, it can be concluded that all independent variables in this study do not occur in multicollinearity between independent variables because all independent variables in this study have values tolerance > 0.1 and VIF < 10. Researchers conclude that the non-multicollinearity assumption for the regression model has been met.

### Heteroscedasticity Test Results

This research analyzes the heteroscedasticity test using a graph *scatter plot* by looking at the pattern on the graph. If there is no particular pattern and it does not spread above or below zero on the y-axis, then there is no heteroscedasticity in the research.



**Figure 6. Heteroscedasticity Test Results (Graph Scatterplot)**

Source: Research Results, Processed Data, 2024



Figure 6 shows that on the graph *scatter plot*, the points do not overlap and spread randomly or irregularly above or below the number 0 on the Y axis. So, it can be concluded that there is no heteroscedasticity problem in the regression model so the regression model is suitable for use.

### Multiple Linear Regression Analysis Test Results

**Table 6. Multiple Linear Regression Analysis Test Results**

Variable	Unstandardized Coefficients (B)	Significance
(Constant)	-.415	.677
Financial Literacy	-.053	.569
Financial Inclusion	.298	.000
Financial Self-Efficacy	.078	.420
Financial Technology	.213	.020
Credit Granting	.230	.008
Intellectual Capital	.254	.009

Source: Research Results, Processed Data (2024)

Based on the test results listed in Table 6, it can be concluded that the multiple linear regression equation is as follows:

$$Y = -0,415 - 0,053X_1 + 0,298X_2 + 0,078X_3 + 0,213X_4 + 0,230X_5 + 0,254X_6$$

The results of the multiple linear regression equation provide the understanding that:

The constant of -0.415 explains that if financial literacy (X<sub>1</sub>), financial inclusion (X<sub>2</sub>), financial self-efficacy (X<sub>3</sub>), financial technology (X<sub>4</sub>), credit granting (X<sub>5</sub>), and intellectual capital (X<sub>6</sub>) value is equal to 0 (zero), then the financial performance (Y) has decreased.

Variable regression coefficient financial literacy (X<sub>1</sub>) of - 0.053 explains that if the variable financial literacy (X<sub>1</sub>) increases by 1%, then the value financial performance (Y) will decrease or decrease by 0.053 assuming the other independent variables remain constant.

Variable regression coefficient financial inclusion (X<sub>2</sub>) of 0.298 explains that if the variable financial inclusion (X<sub>2</sub>) increases by 1%, then the value financial performance (Y) will increase or experience an increase of 0.298 assuming the other independent variables remain constant.

Variable regression coefficient financial self-efficacy (X<sub>3</sub>) of 0.078 explains that if the variable financial self-efficacy (X<sub>3</sub>) increases by 1%, then the value of profit growth (Y) will increase or experience an increase of 0.078 assuming the other independent variables remain constant.

Variable regression coefficient financial technology (X<sub>4</sub>) of 0.213 explains that if the variable financial technology (X<sub>4</sub>) increases by 1%, then the value financial performance (Y) will increase or experience an increase of 0.213 assuming the other independent variables remain constant.

Variable regression coefficient credit granting (X<sub>5</sub>) of 0.230 explains that if the variable credit granting (X<sub>5</sub>) increases by 1%, then the value financial performance (Y) will increase or experience an increase of 0.230 assuming the other independent variables remain constant.



Variable regression coefficient intellectual capital ( $X_6$ ) of 0.254 explains that if the variable intellectual capital ( $X_6$ ) increases by 1%, then the value financial performance (Y) will increase or experience an increase of 0.254 assuming the other independent variables remain constant.

Partial Test Results (t)

**Table 7. Partial Test Results (t)**

Variable	Mark T Count	Significance Value
Financial Literacy	-.571	.569
Financial Inclusion	4.019	.000
Financial Self-Efficacy	.809	.420
Financial Technology	2.372	.020
Credit Granting	2.728	.008
Intellectual Capital	2.687	.009

Source: Research Results, Processed Data (2024)

Based on Table 7, it can be concluded that the results of the t-statistical test on the hypotheses in this research are as follows:

Variable Financial Literacy

$H_{01}$  = If  $t_{count} < t_{table}$  and level significance  $> 0,05$  for *financial literacy* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

$H_{a1}$  = If  $t_{count} > t_{table}$  and level significance  $< 0,05$  for *financial literacy* positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

Based on the results of the t-test calculations in Table 7, the obtained  $t_{count}$  for variables *financial literacy* ( $X_1$ ) is -0.571 smaller than  $t_{table}$  1.661 and with a significance value of 0.569 which is greater than 0.05. Shows that  $H_{01}$  accepted and  $H_{a1}$  rejected, so it is proven that the variable *financial literacy* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

Variable Financial Inclusion

$H_{02}$  = If  $t_{count} < t_{table}$  and level significance  $> 0,05$  for *financial inclusion* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

$H_{a2}$  = If  $t_{count} > t_{table}$  and level significance  $< 0,05$  for *financial inclusion* positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

Based on the results of the t-test calculations in Table 7, it is obtained t count for variables *financial inclusion* ( $X_2$ ) of 4.019 is greater than  $t_{table}$  1.661 and with a significance value of 0.000 which is smaller than 0.05. Shows that  $H_{02}$  is rejected and  $H_{a2}$  is accepted, so it is proven that the variable *financial inclusion* has a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

Variable Financial Self-Efficacy

$H_{03}$  = If  $t_{count} < t_{table}$  and level significance  $> 0,05$  for *financial self-efficacy* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.



Ha3= If  $t_{\text{count}} > t_{\text{table}}$  and level significance  $< 0,05$  for *financial self-efficacy* positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

Based on the results of the t-test calculations in Table 7, obtained  $t_{\text{count}}$  for variables *financial self-efficacy* ( $X_3$ ) of 0.809 smaller than  $t_{\text{table}}$  1.661 and with a significance value of 0.420, greater than 0.05. Shows that  $H_{03}$  accepted and  $H_a 3$  rejected, so it is proven that the variable *financial self-efficacy* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

#### Variable Financial Technology

$H_{04}$  = If  $t_{\text{count}} < t_{\text{table}}$  and level significance  $> 0,05$  for *financial technology* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

Ha4 = If  $t_{\text{count}} > t_{\text{table}}$  and level significance  $< 0,05$  for *financial technology* positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

Based on the results of the t-test calculations in Table 7, the obtained  $t_{\text{count}}$  for variables *financial technology* ( $X_4$ ) of 2.372 is greater than  $t_{\text{table}}$  1.661 and with a significance value of 0.020 which is smaller than 0.05. Shows that  $H_{04}$  was rejected and  $H_a4$  accepted, so it is proven that the variable *financial technology* has a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

#### Variable Credit Granting

$H_{05}$  = If  $t_{\text{count}} < t_{\text{table}}$  and level significance  $> 0,05$  for *credit granting* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

Ha5= If  $t_{\text{count}} > t_{\text{table}}$  and level significance  $< 0,05$  for *credit granting* positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

Based on the results of the t-test calculations in Table 7, the obtained  $t_{\text{count}}$  for variables *credit granting* ( $X_5$ ) of 2.728 is greater than Table 1.661 and with a significance value of 0.008 which is smaller than 0.05. Shows that  $H_{05}$  was rejected and  $H_a5$  accepted, so it is proven that the variable *credit grants* a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

#### Variable Intellectual Capital

$H_{06}$  = If  $t_{\text{count}} < t_{\text{table}}$  and level significance  $> 0,05$  for *intellectual capital* does not have a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

Ha6 = If  $t_{\text{count}} > t_{\text{table}}$  and level significance  $< 0,05$  for an *intellectual capital* positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

Based on the results of the t-test calculations in Table 7, the obtained  $t_{\text{count}}$  for variables *intellectual capital* ( $X_6$ ) of 2.687 is greater than Table 1.661 and with a significance value of 0.009 which is smaller than 0.05. Shows that  $H_{06}$  was rejected and  $H_a6$  accepted, so it is proven that the variable *intellectual capital* has a positive and significant effect on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.



Simultaneous Test Results (f)

**Table 8. Simultaneous Test Results (f)**

Model	Sum of Squares	Uji F		Mean Square	F	Sig.
		Df				
1 <i>Regression</i>	1331.123	6		221.854	130.080	.000 <sup>b</sup>
<i>Residual</i>	162.024	95		1.706		
<b>Total</b>	<b>1493.147</b>	<b>101</b>				

Source: Research Results, Processed Data (2024)

The simultaneous test is carried out by comparing the F value and  $F_{table}$  with a significance level of 5%. If profitability  $< 0.05$  then the independent variable partially has a significant effect on the dependent variable. To find  $F_{table}$  namely  $df_1 = k - 1 = 7 - 1 = 6$  and  $df_2 = n - k = 102 - 7 = 95$  with a significance level of 0.05. So, the rate  $F_{table}$  is 2,196. If  $F_{count} > F_{table}$  then it can be said that the hypothesis is accepted and if the significance level is  $< 0.05$  then it can be said that the independent variable has an effect on the dependent variable. The F test is carried out to test the hypothesis:

$H_{07} =$  If  $F_{count} < F_{table}$  and level significance  $> 0.05$  then simultaneously *financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital* do not have a positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province.

$H_{a7} =$  If  $t_{count} > t_{table}$  and level significance  $< 0.05$  then simultaneously *financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital* have positive and significant effects on the *financial performance of MSMEs* in the Bangka Belitung Islands Province.

Based on Table 8 it can be seen that the value  $F_{count}$  is equal to 130.080 greater than  $F_{table}$  with a value of 2.196 and a significance value of 0.000 which is smaller than the significance level of 0.05. Shows that  $H_{07}$  rejected and  $H_{a7}$  accepted, so it can be concluded that *financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital* together (simultaneously) have a positive and significant effect on the *financial performance of MSMEs* in the Bangka Belitung Islands Province.

Test results Coefficient Determination (R2).

**Table 9. Test Results Coefficient Determination (R2)**

Coefficient Determination				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.944 <sup>a</sup>	.891	.885	1.306

Source: Research Results, Processed Data (2024)

**Table 10. Y Standard Deviation**

Y Standard Deviation		
Financial Performance		
N	Valid	102
	Missing	0
Std. Deviation		3.845

Source: Research Results, Processed Data (2024)



In test coefficient determination, if the R<sup>2</sup> value is closer to 1, the influence of the independent variable on the dependent variable will be stronger. Based on Table 9, it can be seen that the R-value square amounts to 0.891 so it can be concluded that 89.1% of the variation in the dependent variable can be explained by the independent variable. While value Adjusted R Square (Adjusted R<sup>2</sup>) is 0.885 or 88.5%. So, it can be concluded that simultaneously financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital can affect financial performance amounting to 88.5% while the remaining 11.5% were influenced by other variables not examined in this research. Furthermore, it is also a visible Standard Error of the Estimate (SEE) of 1.306. The smaller the SEE value, the more accurate the modal regression will be in predicting the dependent variable or can be interpreted as the value Standard Error of the Estimate the smaller the standard deviation of the independent variable, the better the regression model is at predicting the value of the independent variable. In Table 10 it can be seen that the standard deviation of the independent variable, namely Y, is 3.845, which is greater than the Standard Error of the Estimate ( $3.845 > 1.306$ ) which means that the modal regression is increasingly precise in predicting variables' financial performance.

The research results show that simultaneously the variables financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital have a positive and significant effect on the financial performance of MSMEs in Bangka Belitung. That is, if financial literacy, financial inclusion, financial self-efficacy, financial technology, credit granting, and intellectual capital together experience an increase, then the financial performance of MSMEs also increases. The results of this research are supported by (Marini et al., 2024); (Hutauruk et al., 2024; Monica & Ruzikna, 2024; and Novitasari & Piliyanti, 2023), which proves that there is an influence simultaneously financial literacy, financial inclusion, and financial technology on financial performance and is strengthened by research (Asmin et al., 2021); (Ayem & Wahidah, 2021) which proves that partially and simultaneously variables financial self-efficacy has a positive and significant effect on SME performance. In addition, research by (Hasmirati & Akuba, 2022; Kaka et al., 2023); (Artati, 2017; Solechan, 2017; Sudibya, 2014) also proves that credit granting and intellectual capital have a positive and significant effect on the financial performance of MSMEs.

Partially variable financial inclusion, financial technology, credit granting, and intellectual capital which are owned and applied by MSME players in managing their business finances proven to have an influence on financial performance in MSMEs in the Bangka Belitung Islands Province, meaning that MSMEs in the Bangka Belitung Islands Province own and utilize financial inclusion, financial technology, credit granting and intellectual capital, then it will produce financial performance good and maximum.

Meanwhile, variables financial literacy and financial self-efficacy partially have no positive and significant effect on the financial performance of MSMEs in the Bangka Belitung Islands Province, this is due to the low-level financial literacy and financial self-efficacy owned by MSME players in Bangka Belitung which makes them unable to manage their finances well due to a lack of understanding of financial management and a lack of confidence and self-confidence in their abilities in making financial-related decisions.



## CONCLUSION

Based on the research results and discussion in this research, it can be concluded that partially the research results show that *financial inclusion*, *financial technology*, *credit granting*, and *intellectual capital* have positive and significant effects on the *financial performance* of MSMEs in the Bangka Belitung Islands Province, meanwhile *financial literacy* and *financial self-efficacy* does not have a positive and significant effect on *financial performance* MSMEs in the Bangka Belitung Islands Province. Simultaneously *financial literacy*, *financial inclusion*, *financial self-efficacy*, *financial technology*, *credit granting*, and *intellectual capital* have positive and significant effects on the *financial performance* of MSMEs in the Bangka Belitung Islands Province.

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